







this form, together with applicable fee(s), to:

Box ISSUE FEE Assistant Commissioner for Patents Washington, D.C. 20231



| where appropriate. All indicated unless corre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | further correspondent<br>ted below or directe                    | ce includ                                                                                                                                                                                                                                                                                                     | ing the Patent advance                        | ce Antier                           | s and notification                                           | ofma                                                                                                                                                                                                                                                                                  | intensince feet w                                                                                                                                                                                                                                                   | ill he mai  | led to the curren                        | 1              | rondence address on   |  |
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| maintenance fee notifications.  CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)  27997 7590 0t/3 t/2002                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                  |                                                                                                                                                                                                                                                                                                               |                                               |                                     |                                                              | Note: The certificate of mailing below can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing. |                                                                                                                                                                                                                                                                     |             |                                          |                |                       |  |
| PRIEST & GOLDSTEIN PLLC 529 DOGWOOD DRIVE CHAPEL HILL, NC 27516                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                  |                                                                                                                                                                                                                                                                                                               |                                               |                                     |                                                              |                                                                                                                                                                                                                                                                                       | Certificate of Mailing I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above on the date indicated below. |             |                                          |                |                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                  |                                                                                                                                                                                                                                                                                                               |                                               |                                     |                                                              |                                                                                                                                                                                                                                                                                       | Maria                                                                                                                                                                                                                                                               | nna T       | ortorell:                                | Ĺ              | (Depositor's name)    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                  |                                                                                                                                                                                                                                                                                                               |                                               |                                     |                                                              |                                                                                                                                                                                                                                                                                       | non                                                                                                                                                                                                                                                                 | m           | Lorde                                    | reil           | (Signature)           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                  |                                                                                                                                                                                                                                                                                                               |                                               |                                     | L                                                            |                                                                                                                                                                                                                                                                                       | _aps                                                                                                                                                                                                                                                                | il ö        | 15,20                                    | 2              | (Date)                |  |
| APPLICATION NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | FILING D                                                         | ATE                                                                                                                                                                                                                                                                                                           | T                                             | FIRST N                             | NAMED INVENTO                                                | R                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                     | TTORNE      | Y DOCKET NO.                             | CONI           | FIRMATION NO.         |  |
| 09/422,015 10/21/1999                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                  |                                                                                                                                                                                                                                                                                                               |                                               | GERALD G. PECHAN                    |                                                              |                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                     |             |                                          |                |                       |  |
| TITLE OF INVENTION ARCHITECTURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ON: METHODS AN                                                   | ID APP                                                                                                                                                                                                                                                                                                        | IRATUS FOR ABBI                               | KEVIA                               | IED INSTRUCT                                                 | ION                                                                                                                                                                                                                                                                                   | SEIS ADAFIA                                                                                                                                                                                                                                                         | BLE IO      | CONFIGURA                                | SLE PR         | OCESSOR               |  |
| TOTAL CLAIMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | APPLN. TYPE                                                      |                                                                                                                                                                                                                                                                                                               | SMALL ENTITY                                  | Ī                                   | ISSUE FEE                                                    | PUI                                                                                                                                                                                                                                                                                   | LICATION FEE                                                                                                                                                                                                                                                        | TOT         | TAL FEE(S) DUE                           |                | DATE DUE              |  |
| 43                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | nonprovisional                                                   |                                                                                                                                                                                                                                                                                                               | YES                                           |                                     | \$640                                                        |                                                                                                                                                                                                                                                                                       | \$0                                                                                                                                                                                                                                                                 |             | \$640                                    |                | 04/30/2002            |  |
| EX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | AMINER                                                           |                                                                                                                                                                                                                                                                                                               | ART UNIT                                      |                                     | CLASS-SUBCLAS                                                | ss                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                     |             |                                          |                |                       |  |
| KIM, I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2183 712-22700                                                   |                                                                                                                                                                                                                                                                                                               |                                               |                                     |                                                              |                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                     |             |                                          |                |                       |  |
| I. Change of corresponding of the corresponding of | nber are recommende                                              | the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.  Priest & Goldste1  2  2  3  3 |                                               |                                     |                                                              |                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                     |             | oldstein,PLI                             |                |                       |  |
| 3. ASSIGNEE NAME PLEASE NOTE: Unl been previously subm (A) NAME OF ASSI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | less an assignee is id<br>aitted to the USPTO of<br>GNEE         | entified h                                                                                                                                                                                                                                                                                                    | elow, no assignee dat<br>submitted under sept | nta will a<br>parate co<br>B) RESII | appear on the pate<br>over. Completion of<br>DENCE: (CITY as | ent. Incof this and STA                                                                                                                                                                                                                                                               | form is NOT a st                                                                                                                                                                                                                                                    | abstitute i | s only appropriat<br>for filing an assig | e when a       | an assignment has     |  |
| BOPS, Inc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | •                                                                |                                                                                                                                                                                                                                                                                                               |                                               | Cha                                 | pel Hill,                                                    | . NC                                                                                                                                                                                                                                                                                  | 2/514                                                                                                                                                                                                                                                               |             |                                          |                |                       |  |
| Please check the appro                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | priate assignee catego                                           | ry or cat                                                                                                                                                                                                                                                                                                     | egories (will not be pr                       | rinted or                           | n the patent)                                                | Q in                                                                                                                                                                                                                                                                                  | dividual Scorp                                                                                                                                                                                                                                                      | oration o   | r other private g                        | roup enti      | ty Ogovernment        |  |
| 4a. The following fee(s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ) are enclosed:                                                  |                                                                                                                                                                                                                                                                                                               | 4b                                            | o. Paymo                            | ent of Fee(s):                                               |                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                     |             |                                          |                |                       |  |
| ₹ Issue Fee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                  |                                                                                                                                                                                                                                                                                                               |                                               |                                     | k in the amount of                                           |                                                                                                                                                                                                                                                                                       | • •                                                                                                                                                                                                                                                                 |             | ,                                        |                |                       |  |
| ☐ Publication Fee ☐ Publication Fee ☐ Publication Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Commissioner is hereby authorized by charge the required fee(s), or credit and Deposit Account Number50-1058(enclose an extra copy of this form).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                  |                                                                                                                                                                                                                                                                                                               |                                               |                                     |                                                              |                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                     |             | v overnavnichi io                        |                |                       |  |
| Advance Order - #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | of Copies                                                        |                                                                                                                                                                                                                                                                                                               | - De                                          | eposit A                            | ccount Number_                                               | 50                                                                                                                                                                                                                                                                                    | -1058 (enc                                                                                                                                                                                                                                                          | lose an ex  | ctra copy of this                        | form).         | , overpeyman, to      |  |
| The COMMISSIONER application identified a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                  | TRADI                                                                                                                                                                                                                                                                                                         |                                               | d to app                            | ly the Issue Fee a                                           | nd Pub                                                                                                                                                                                                                                                                                | lication Fee (if a                                                                                                                                                                                                                                                  | ny) or to   | re-apply any pro                         | viously        | paid issue fee to the |  |
| NOTE: The Issue Foother than the applic interest as shown by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ee and Publication Formal; a registered atthe records of the Uni | ee (if required orney or ted States                                                                                                                                                                                                                                                                           | uired) will not be ac                         | 4/25<br>ccepted<br>nee or o         | from anyone                                                  |                                                                                                                                                                                                                                                                                       | AE /10 /9/                                                                                                                                                                                                                                                          | .,          | 71 <b>94</b> 52 000000                   | 47 <b>0</b> 94 | P2015                 |  |
| Burden Hour Stateme<br>depending on the nee<br>to complete this form<br>and Trademark Offic<br>FORMS TO THIS<br>Assistant Commission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ime will vary                                                    | 05/10/2002 MBIZUNE2 00000047 09422015<br>01 FC:242 640.00 OP<br>02 FC:561 30.00 OP                                                                                                                                                                                                                            |                                               |                                     |                                                              |                                                                                                                                                                                                                                                                                       | 640.00 OP                                                                                                                                                                                                                                                           |             |                                          |                |                       |  |
| Under the Paperwor collection of informat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | k Reduction Act of<br>tion unless it displays                    | 1995, n<br>a valid C                                                                                                                                                                                                                                                                                          | o persons are requir<br>OMB control number.   | red to                              | respond to a                                                 |                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                     |             |                                          |                |                       |  |

TRANSMIT THIS FORM WITH FEE(S)